



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/822,651

03/30/2001

Scott J. Tuman

54407US006

9447

32692 7590 12/12/2007
3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST. PAUL, MN 55133-3427

EXAMINER

TSOY, ELENA

ART UNIT

PAPER NUMBER

1792

NOTIFICATION DATE

DELIVERY MODE

12/12/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LegalUSDocketing@mmm.com
LegalDocketing@mmm.com

Office Action Summary	Application No.		Applicant(s)	
	09/822,651		TUMAN ET AL.	
	Examiner		Art Unit	
	Elena Tsoy		1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 71-79, 81-83, 85-90 and 92-115 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 71-79, 81-83, 85-90 and 92-115 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 30, 2007 has been entered.

Response to Amendment

Amendment filed on November 15, 2007 has been entered. New claims 114-115 have been added. Claims 71-79, 81-83, 85-90, and 92-115 are pending in the application.

Claim Objections

1. Claims 71, 83 and 94 are objected to because of the following informalities: "wherein the polymer forming the discrete patches of polymer" should be changed to "wherein the polymer forming the discrete patches of ~~polymer~~" because a second "polymer" is redundant. Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re*

Art Unit: 1792

Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 71-79, 81-83, 85-90, 92-115 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-21, 285 of U.S. Patent No. US 6,503,855. Although the conflicting claims are not identical, they are not patentably distinct from each other because current claims are broader in scope than claims of '855.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1792

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Rejection of claims 85, 107 under 35 U.S.C. 103(a) as being unpatentable over Wessels et al in view of Murasaki (US 5,643,651) has been withdrawn due to amendment.

7. Claims 109, 111, and 114-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al (US 5,669,120) for the reasons discussed in the Final Office action of 8/02/2007.

Wessels et al are applied here for the same reasons as set forth in paragraph 4 of the Office Action mailed on 1/18/2007. The Examiner maintains her position stated in the Response to Applicants' arguments of the Final Office action of 8/02/2007. In the absence of definition, the term "**substrate**" has been given *broadest* reasonable interpretation in light of the supporting disclosure, e.g. *any* film, including a composite film, having a first major side and a second major side, to which first major side a plurality of polymeric regions are fused. Therefore, in contrast to Applicants argument, in Wessels et el, a polymer film 4a with embedded S can be broadly interpreted as substrate as claimed. Therefore, the polymer regions of Wessels et el. are **not** actually formed by forcing molten polymer *through the substrate* but formed by extruding a film 4a of a molten polymer (claimed substrate), joining the polymer film 4a with a fabric S, then forcing the **upper** portion of molten polymer 4a *through the fabric* S into cavities (See Fig. 5). As a result, the polymer of the plurality of polymeric regions in Wessels et al does not extend through the substrate 4a with embedded fabric S as shown in Figs. 4B and 4F.

8. Claims 71-79, 81-83, 86-90, 92-106, and 108-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al in view of Allen et al.

Art Unit: 1792

Wessels et al are applied here for the same reasons as set forth in previous Office Actions. Wessels et al do not teach that a second side of the substrate is free of the polymer making up the plurality of discrete polymeric regions.

Allen et al teach that *conventional* hook and loop components are typically formed by making a fabric with a number of *woven* loops extending outwardly from a backing; the loops may be provided by weaving a base fabric containing supplementary threads to form the loops, or by knitting the loops into a fabric; the male components of such fastening devices are typically formed by subsequently cutting the loops (See column 1, line 64 to column 2, line 6). These conventional processes generally produce *costly* hook and loop fastening materials (See column 2, lines 7-14). However, a *composite* female component of the fastening device for the use in diapers (See column 4, lines 6-7) comprising a *non-woven fibrous web* joined to an *elastic* backing 34 provides a low cost loop fastening material instead of conventional knit or woven fabric (See Figs. 1, 4; column 1, lines 68; column 2, lines 1-24; column 3, lines 6-12; column 5, lines 46-57), as was discussed in previous Office Action. Allen et al further teach that the elastomeric backing 34 may take on a number of different configurations. For example, the backing 34 may comprise a thin film, a laminated of two or more films, a web of elastomeric adhesive that has been extruded in the form of a thin film, or any combination thereof (See column 9, line 64 to column 10, line 11). It is the Examiner's position that *different* polymers may be used for making two films in the laminate of Allen et al because Allen et al does not limit their teaching to particular films; and because Allen et al teach that the elastomeric backing 34 may comprise two films of *different* polymers: a film of elastomeric *adhesive* (See column 15, lines 51-52) and a *non-adhesive* elastomeric film (See column 16, lines 34-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a loop fastening material of Allen et al comprising non-woven fibrous web joined to an *elastic* backing comprised of a laminate of two films of *different* polymers for making a fastener in Wessels et al so that only upper polymer film Wessels et al (which is joined to the fibrous web) is used for making hooks, instead of conventional knit or woven fabric with the expectation of providing the desired low cost, as taught by Allen et al.

The Examiner takes official notice that it is within the level of ordinary engineering skill to add another film layer of a polymer that is different from a polymer layer 4. For example, manufacturing method of Wessels et al, e.g. as is shown in Fig. 5, can be carried out by substituting a knit substrate with a *non-woven fibrous web* and positioning *co-extruder*, another *extruder* or a roll of a *preformed* polymer film either before the roller 13 or after the roller 13 with two additional pair of calendaring rollers so that another polymer film layer would be laminated with the extruded polymer layer 4, *prior to* cooling by the air blower 14.

9. Claims 71-79, 81-83, 86-90, 92-106, and 108-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al in view of Allen et al and Provost et al (US 5606781).

Wessels et al in view of Allen et al are applied here for the same reasons as above. Provost et al are applied here as evidence to show that it is well known in the art that hook-like coupling elements can be formed by clipping side portions of synthetic fiber monofilament loops which are woven into a substrate cloth as subsidiary warps in the weaving process to form upstanding loops on the surface of the substrate cloth, or alternatively, the hooks can be molded integrally with a base 406 using a synthetic resin material, or can be *co-extruded* with the base

Art Unit: 1792

using a cross head die; or the hook elements on a thin base may be *laminated* to a different sheet form substrate.

10. Claims 85, 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al in view of Allen et al/Wessels et al in view of Allen et al and Provost et al/, further in view of Murasaki (US 5,643,651) for the reasons of record set forth in paragraph 9 of the Office Action mailed on 4/13/2006.

Response to Arguments

9. Applicants' arguments filed October 30, 2007 have been fully considered but they are not persuasive.

A. "*A prima facie case of obviousness at least because it does not offer a reasonable likelihood of success*".

Applicants argue that the asserted obviousness rejection over Wessels et al in view of Allen et al does not establish a *prima facie* case of obviousness at least because it does not offer a reasonable likelihood of success. As discussed above, all of the methods of manufacturing the articles of Wessels et al. require that at least a portion of a molten polymer be forced through a porous knit or woven fabric substrate S. The Examiner is now asserting that one of ordinary skill would substitute a polymer film for that porous "knit or woven fabric and somehow force a molten polymer therethrough.

The Examiner respectfully disagrees with this argument for the reasons discussed above. The molten resin would be forced not through the polymer layer but through the a *non-woven fibrous web*.

Art Unit: 1792

B. "Each Discrete Polymeric Region Of The Plurality Of Discrete Polymeric Regions Comprises A Discrete Patch Having A Perimeter That Is Entirely Bordered By "he First Major Side Of The Substrate"

Although the assertion is made by the Office Action that the difference between "a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate" and the continuous stripes of polymer taught by Wessels et al is a mere matter of design choice, no support or reasoning is provided for that conclusory assertion. Applicants respectfully submit, however, that a change in the patterns disclosed by Wessels et al. would be, e.g., a change in the spacing or width of the continuous stripes - not a change to discrete patches as recited in the rejected claims.

The Examiner respectfully disagrees with this argument. Wessels et al teach "Further, since the pile core sheet is manufactured by weaving or knitting, it is possible to change the design of the pile core sheet in arrangement and orientation of piles and to determine the size, shape or arrangement of hook elements optionally. It is accordingly possible to cope instantly with **various requirements** for the surface fastener in which hook and loop elements coexist." (See column 10, lines 53-60). Therefore, in contrast to Applicants argument, a change in the patterns disclosed by Wessels et al would be NOT only a change in the spacing or width of the continuous stripes - but a change in arrangement of hook elements according to **various requirements** for the surface fastener.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 5:30 PM.

Art Unit: 1792

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy, Ph.D.
Primary Examiner
Art Unit 1792

ELENA TSOY
PRIMARY EXAMINER
ETsoy

November 30, 2007